

In the Claims:

Claim 1 (currently amended): A materials handling device, comprising:

- (a) a chassis;
- (b) an elongated handle shaft mounted to said chassis for use in maneuvering said device;
- (c) at least one roller rotationally mounted to said chassis and in contact with a surface;
- (d) at least one battery pack supported on said handle shaft and being configured so as to substantially surround a portion of said handle shaft, said battery pack having a housing which includes a pair of holders being semi-cylindrical in configuration that fit and fasten together to provide said housing with an annular configuration and define a passage through said housing receiving said portion of said handle shaft;
- (e) a drive unit spaced from said battery pack and mounted to said chassis so as to drivingly engage said roller; and
- (f) means for electrically connecting said battery pack to said drive unit to supply electrical power to operate said drive unit to transmit a high torque driving output to said roller so that a rotary driving output can then be supplied by said roller to enable said device to thereby move across the surface and to manipulate and move a heavy load.

Claim 2 (original): The device of claim 1 wherein said battery pack includes a plurality of individual battery cells.

Claim 3 (original): The device of claim 2 wherein said battery cells are NiCad batteries.

Claim 4 (original): The device of claim 2 wherein said battery cells are NiMH batteries.

Claim 5 (original): The device of claim 2 wherein said battery cells are Lithium batteries.

Claim 6 (currently amended): ~~The A materials handling device of claim 2 wherein, comprising:~~

- (a) a chassis;
- (b) an elongated handle shaft mounted to said chassis for use in maneuvering said device;
- (c) at least one roller rotationally mounted to said chassis and in contact with a surface;
- (d) at least one battery pack supported on said handle shaft and being configured so as to substantially surround a portion of said handle shaft, said battery pack including a plurality of individual battery cells, each of said battery cells having about a 1.2 volt rating;
- (e) a drive unit spaced from said battery pack and mounted to said chassis so as to drivingly engage said roller; and
- (f) means for electrically connecting said battery pack to said drive unit to supply electrical power to operate said drive unit to transmit a high torque driving output to said roller so that a rotary driving output can then be supplied by said roller to enable said device to thereby move across the surface and to manipulate and move a heavy load.

Claim 7 (original): The device of claim 6 wherein said battery pack includes forty of said battery cells such that said battery pack has about a 48 volt rating.

Claim 8 (currently amended): The device of claim 2 wherein ~~said battery pack includes a holders of said housing of annular configuration supporting said battery cells in stacked end-to-end electrically contacting relationships and have upper and lower electrical contacts electrically contacting end ones of said stacked battery cells.~~

Claim 9 (currently amended): The device of claim 8 ~~2~~ wherein ~~said holders of said housing has a central passage formed therethrough for receiving said handle shaft such that said housing~~

supports a plurality of stacks of said battery cells spaced apart from one another about said handle shaft.

Claim 10 (canceled).

Claim 11 (currently amended): A materials handling device, comprising:

(a) a chassis;  
(b) at least one rechargeable battery pack removably and replaceably supported on said device, said battery pack including a plurality of individual battery cells and a housing of annular configuration supporting said battery cells in stacked end-to-end electrically contacting relationships and having upper and lower electrical contacts electrically contacting end ones of said stacked battery cells;

(c) an electric motor and gearbox in a driving relation with a roller in contact with a surface; and

(d) a controller supported on said chassis and having a plurality of capacitors connected to said battery pack and charged by said battery pack so as to have available a store of electrical power, said capacitors of said controller being electrically connected between said battery pack and said electric motor such that said capacitors of said controller can supply said store of electrical power to said electric motor instantaneously when needed which via said gearbox can transmit a high torque driving output to said roller so that a rotary driving output can then be supplied by said roller to enable said device to thereby move across the surface and to manipulate and move a heavy load; and

(e) an elongated handle shaft mounted to said chassis for use in maneuvering said device, said battery pack being removably and replaceably supported on said handle shaft.

Claim 12 (original): The device of claim 11 further comprising:

a switch connected to said controller and being activatable by

an operator to cause said capacitors of said controller to discharge and supply instantaneously said store of electrical power to said electric motor.

Claim 13 (original): The device of claim 11 wherein said electric motor is about a 48-volt electric motor.

Claims 14-16 (canceled).

Claim 17 (currently amended): The device of claim ~~16~~ 11 wherein said battery cells are NiCad batteries.

Claim 18 (currently amended): The device of claim ~~16~~ 11 wherein said battery cells are NiMH batteries.

Claim 19 (currently amended): The device of claim ~~16~~ 11 wherein said battery cells are Lithium batteries.

Claim 20 (currently amended): The A materials handling device of claim 16 wherein, comprising:

- (a) a chassis;
- (b) at least one rechargeable battery pack removably and replaceably supported on said device;
- (c) an electric motor and gearbox in a driving relation with a roller in contact with a surface;
- (d) a controller supported on said chassis and having a plurality of capacitors connected to said battery pack and charged by said battery pack so as to have available a store of electrical power, said capacitors of said controller being electrically connected between said battery pack and said electric motor such that said capacitors of said controller can supply said store of electrical power to said electric motor instantaneously when needed which via said gearbox can transmit a high torque driving output to said roller so that a rotary driving output can then be supplied by said roller to enable said device to thereby move across the

surface and to manipulate and move a heavy load; and

(e) an elongated handle shaft mounted to said chassis for use in maneuvering said device, said battery pack being supported on said handle shaft and including a plurality of individual battery cells, each of said battery cells having about a 1.2 volt rating.

Claim 21 (original): The device of claim 20 wherein said battery pack includes forty of said battery cells such that said battery pack has about a 48 volt rating.

Claim 22 (canceled).

Claim 23 (currently amended): The device of claim 22 11 wherein said housing has a central passage formed therethrough for receiving a portion of said device such that said housing supports a plurality of stacks of said battery cells spaced apart from one another about said portion of said device.

Claim 24 (currently amended): The device of claim 22 23 wherein said housing ~~is~~ includes a pair of holders semi-cylindrical in configuration that fit and fasten together to provide said housing with said annular configuration and said passage therethrough.

Claims 25-26 (canceled).

Claim 27 (currently amended): A materials handling system, comprising:

(a) a battery charger disposed at a location nearby an area of operation and operable to convert a rechargeable battery pack from a discharged condition to a charged condition; and

(b) a materials handling device displaced from said battery charger and being operable for moving a load at the area of operation, said materials handling device including

(i) a drive unit provided on the device;

(ii) a plurality of rechargeable battery packs, at least one of said rechargeable battery packs being removably and replaceably provided on said device for supplying electrical power to operate said drive unit, at least another of said rechargeable battery packs being provided at the location of said battery charger and maintained in a charged condition by said battery charger so that said another rechargeable battery pack is available to replace said at least one rechargeable battery pack on said device upon said at least one rechargeable battery pack on said device reaching the discharged condition, each of said battery packs includes a plurality of individual battery cells, each of said battery cells having about a 1.2 volt rating, and

(iii) a controller provided on said device and having a plurality of capacitors connected to said at least one rechargeable battery pack on said device, said capacitors being charged by said at least one rechargeable battery pack on said device so as to have available a store of electrical power, said capacitors also being electrically connected between said at least one rechargeable battery pack and said drive unit such that said capacitors can supply said store of electrical power to said drive unit instantaneously when needed such that said drive unit can transmit a high torque driving output to enable said device to thereby move across a surface and to manipulate and move the load.

Claim 28 (original): The system of claim 27 further comprising:

a switch provided on said device and connected to said controller and being activatable by an operator to cause said capacitors of said controller to discharge and supply instantaneously said store of electrical power to said drive unit.

Claim 29 (canceled).

Claim 30 (currently amended): The system of claim 297 wherein said battery cells are NiCad batteries.

Claim 31 (currently amended) : The system of claim 297 wherein said battery cells are NiMH batteries.

Claim 32 (currently amended) : The system of claim 297 wherein said battery cells are Lithium batteries.

Claim 33 (canceled).

Claim 34 (currently amended) : The system of claim 297 wherein each of said battery packs includes forty of said battery cells such that said battery pack has about a 48 volt rating.

Claim 35 (original) : The system of claim 27 wherein said drive unit includes an electric motor having about a 48-volt rating.

Claim 36 (canceled).